

CLAIMS

What is claimed is:

1. A method of forming a peer-to-peer, scalable bandwidth connection between a first computer system and a second computer system each connected to a public computer network, the method comprising the steps of:

establishing at least one physical point-to-point link between the first computer system and the public computer network, the first computer system link having a network address that is static and known to the second computer system;

establishing at least one physical point-to-point link between the second computer system and the public computer network, the second computer system link having a network address that is possibly unknown to the first computer system;

establishing an inferior virtual circuit to interconnect the first and second computer systems using the physical links and the public computer network;

establishing a superior virtual circuit between the first computer system and the second computer system, the superior virtual circuit comprising a plurality of inferior virtual circuits, each inferior virtual circuit including at least one unique physical point-to-point link not used by any other virtual link;

wherein the bandwidth of the superior virtual circuit is scaled by establishing additional physical point-to-point links between either the first or second computer system and the public network and establishing new inferior virtual circuit utilizing the additional physical point-to-point links; and

wherein the bandwidth available to the superior virtual circuit is equal to the minimum aggregate bandwidth of the available physical point-to-point links between either the first or second computer system.

2. A method of forming a peer-to-peer, scalable bandwidth connection between two computer systems connected to a public computer network as recited in claim 1, wherein the superior virtual circuit is formed by encapsulating network protocol data with a security protocol.

